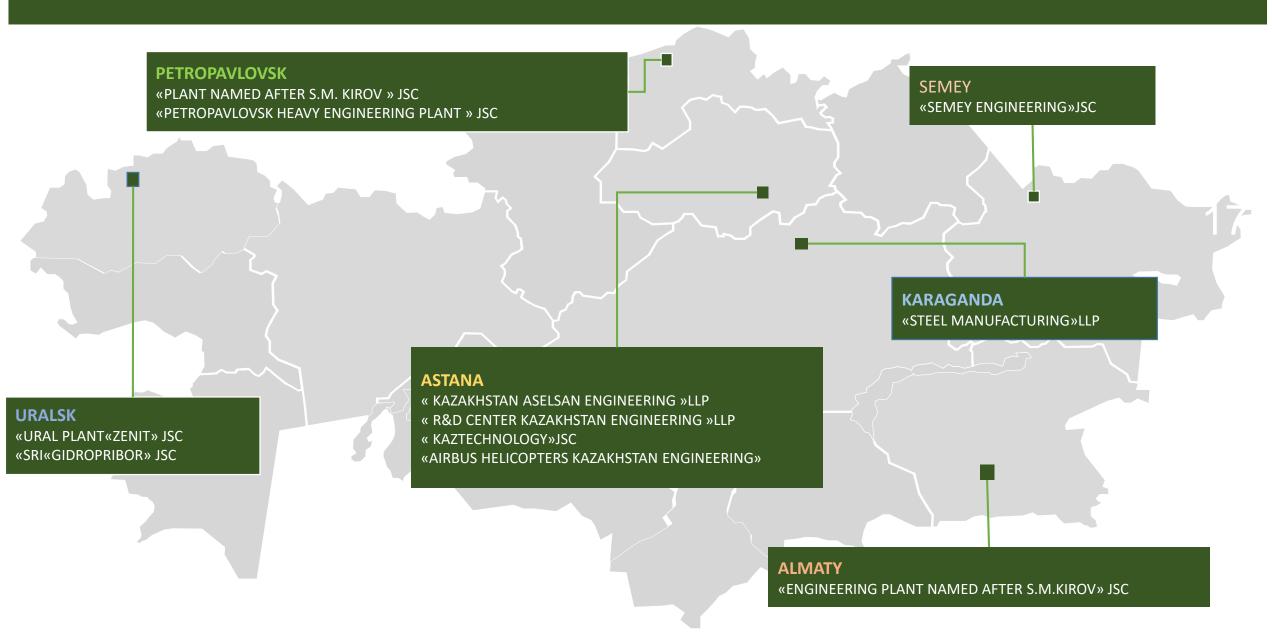


National holding uniting enterprises of the defense-industrial complex of the Republic of Kazakhstan, engaged in production activities in the interests of the Ground Forces, Air Defense Forces, and Naval Forces.

## STRUCTURE OF THE GROUP "NC "KAZAKHSTAN ENGINEERING"JSC





# «SEMEY ENGINEERING» JSC



#### MANUFACTURED PRODUCTS

- SERVICE, REPAIRMENT AND MODERNIZATION OF ARMORED VEHICLES (T-72, APC, BMP).
- REPAIRMENT OF SPECIAL EQUIPMENT (IMR-2 ON T-72 CHASSIS, BAT-2, BREM, EOV-4421 ON KRAZ CHASSIS, PTS-2);
- PRODUCTION OF COMPONENTS FOR MILITARY EQUIPMENT:
- PRODUCTION OF COMPONENTS FOR RAILWAYS (GONDOLA HATCH COVERS, LONGITUDINAL SIDES, END PLATFORM SIDES).

- ORGANIZATION OF LARGE-KNOT ASSEMBLY OF ARMORED PERSONNEL CARRIERS BTR-82A;
- ORGANIZATION OF LARGE-KNOT ASSEMBLY OF SPECIAL TRACKED FIRE-FIGHTING VEHICLE SPM;
- ORGANIZATION OF LICENSED LARGE-KNOT ASSEMBLY OF SBM «TIGER»;
- PRODUCTION OF SPECIAL-PURPOSE MAZ VEHICLES:
- MODERNIZATION OF THE TRACKED TRANSPORTER-TRACTOR GT-T (PRODUCTION OF A PROTOTYPE OF LIGHT- ARMORED GT-T INSTEAD OF MTLB);













# «S.M. KIROV PLANT» JSC



#### MANUFACTURED PRODUCTS

- VHF, KV RANGES RADIO-STATIONS
- CREATION OF ANTI-FIRE ROBOTS
- SUPPLY OF ACCESS CONTROL SYSTEMS (ZIK-SCUD)
- SUPPLY OF HIGHWAY MEDICAL AND RESCUE STATIONS
- FIELD EQUIPMENT
- PRODUCTION OF COMPUTERS, LAPTOPS, TABLETS;
- PRODUCTION OF MULTILAYER PRINTED CIRCUIT BOARDS;
- MODERNIZATION OF MOBILE RADIO RELAY STATION
- DELIVERIES OF «CONVOY-P» SYSTEM FOR RAILWAY DIRECTION
- SUPPLY OF RADIO-ELECTRONIC EQUIPMENT FOR RAILWAY TRANSPORT

- RADIO-ELECTRONIC WARFARE AND RADIO-ELECTRONIC INTELLIGENCE
- DEVELOPMENT OF RADAR AND ANTENNA PLATFORMS
- ASSEMBLY OF UAVs













# «PETROPAVLOVSK HEAVY ENGINEERING PLANT» JSC



#### MANUFACTURED PRODUCTS

- RTO OF THE TACTICAL MISSILE SYSTEM «TOCHKA-U»
- DESIGN AND PRODUCTION WORK FOR A MULTIPLE LAUNCH ROCKET SYSTEM
- SPECIALIZED EQUIPMENT FOR THE OIL INDUSTRY
- MOBILE DRILLING AND LIFTING RIGS
- SPECIAL SERVICE EQUIPMENT
- HEAT-EXCHANGE EQUIPMENT
- POWER EQUIPMENT
- RAILWAY EQUIPMENT
- INSTRUMENT CABLE PRODUCTS, TOOL PRODUCTION

- DEVELOPMENT OF A PROTOTYPE OF AN ANTI-TANK MISSILE SYSTEM
- REPAIR AND MODERNIZATION OF THE «STRELA» SYSTEM
- REPAIR AND MODERNIZATION OF MORTARS
- EXPANSION OF THE PRODUCT RANGE IN THE OIL AND GAS, RAILROAD **SECTOR**





























## **«ZENIT» URALSK PLANT»**



#### MANUFACTURED PRODUCTS

- BORDER PATROL BOATS
- PRODUCTION OF METAL STRUCTURES, VESSELS
- MISSILE AND ARTILLERY SHIPS
- DEVELOPMENT WORK "CREATION OF AN AUXILIARY (MULTIFUNCTIONAL) VESSEL

- MILITARY SHIP WITH A DISPLACEMENT OF APPROXIMATELY 300 TONS (OF THE "DUGONG" TYPE)
- MULTI-PURPOSE FIRE AND RESCUE VESSEL
- MULTI-FUNCTIONAL VESSEL WITH A DISPLACEMENT OF APPROXIMATELY 720 TONS
- MULTI-FUNCTIONAL SUPPLY VESSEL, EXCURSION AND PLEASURE BOATS, LAUNCHES, MOBILE ROBOTIC COMPLEXES
- CONSTRUCTION OF A SHIPYARD IN THE KAZAKHSTAN SECTOR OF THE CASPIAN SEA























## «GIDROPRIBOR» JSC



#### MANUFACTURED PRODUCTS

- REPAIR AND MAINTENANCE WORKS FOR BOATS, SPECIAL PURPOSE VESSELS (SPVS), AND RIVER-SEA TUGBOATS (RSTS)
- SMALL PATROL BOATS
- BORDER PATROL BOATS
- MANUFACTURING OF METAL STRUCTURES AND VESSELS
- FACTORY REPAIRS FOR "SAPSAN" (FALCON) VESSELS 15, 16, AND 18
- MOBILE DIVING STATION. DIVING EQUIPMENT
- TECHNICAL MAINTENANCE OF INFLATABLE RESCUE RAFTS PSN-16MK, PSN-10
- PRODUCTION OF MARINE BUOYS, BEACONS, AND NAVIGATION EQUIPMENT.

- COASTAL MARINE BASE (PMB)
- RESCUE BOAT WITH CABIN AND OPEN DECK
- PRODUCTS AND SERVICES FOR CIVILIAN SHIPBUILDING (UNIVERSAL SHIPS, TUGS, FIREBOATS, ETC.), GRID DECKS, PATROL BOATS, SMALL WATERCRAFT, MARINE INFLATABLE TARGETS, NAVAL TRAINING SIMULATORS, TARGET-TRAINING COMPLEXES, UNMANNED UNDERWATER VEHICLES
- LARGE SHIPBOARD SHIELD



















# «R&D CENTER «KAZAKHSTAN ENGINEERING» LLP



#### MANUFACTURED PRODUCTS

#### MAIN DIRECTIONS:

- R&D ON ARMAMENT OF BARRAGE AMMUNITION
- DEVELOPMENT OF NATIONAL MILITARY STANDARDS, REGULATORY DOCUMENTS, AND OTHER SERVICES
- SUPPORT OF EXPERIMENTAL DESIGN WORKS FOR ENTERPRISES
- SERVICES FOR ORGANIZING TESTS OF WEAPONS AND MILITARY EQUIPMENT AT TEST RANGES
- ANALYSIS OF AMS PRODUCT LINES, AMS MARKETS, ETC.
- TRAINING COURSES FOR THE DEFENSE INDUSTRY COMPLEX
- TACTICAL RECONNAISSANCE COMPLEX "SHAGALA-M"
- SMALL TARGET FOR SAM (SURFACE-TO-AIR MISSILE) SYSTEMS WITH THERMAL FLOW SIMULATION
- BARRAGE AMMUNITION
- ROBOTIC GROUND COMPLEX BASED ON A TRACKED PLATFORM

- ESTABLISHMENT OF A TRAINING CENTER FOR MILITARY STRUCTURES WITH VIRTUAL REALITY (VR)
  TECHNOLOGIES
- AIRCRAFT (HELICOPTER TYPE, VTOL(VERTICAL TAKEOFF AND LANDING), SMALL DRONE, KAMIKAZE)
- UNMANNED GROUND MODULE
- UNMANNED FIREFIGHTING COMPLEX











# **«KAZAKHSTAN AVIATION INDUSTRIES» LLP**



#### MANUFACTURED PRODUCTS

- REGULAR MAINTENANCE OF THE C295M AIRCRAFT C+4Y-CHECK
- TECHNICAL SUPPORT FOR THE C295M AIRCRAFT
- C+8Y MAINTENANCE CHECK FOR THE C295M AIRCRAFT
- ROUTINE TECHNICAL SERVICING OF THE AN-72/AN-74 AIRCRAFT
- ASSEMBLY OF SKYLARK-1LEX UAV COMPLEXES
- REPAIR OF SU-25 AIRCRAFT.

- PLANNED MAINTENANCE OF THE C295M AIRCRAFT
- MASS ASSEMBLY OF ANKA UAVs
- COMPREHENSIVE SERVICING OF SU-30 AIRCRAFT
- LOCALIZATION OF ASSEMBLY PRODUCTION AND SERVICE FOR L39NG AND L-410 AIRCRAFT.













# TOO «AIRBUS HELICOPTERS KAZAKHSTAN ENGINEERING»



#### MANUFACTURED PRODUCTS

- H130, H145, H125 HELICOPTERS
- REGULATORY WORKS (TECHNICAL MAINTENANCE) ON AIRBUS HELICOPTERS
- PREPARATION OF TECHNICAL PERSONNEL AND PILOTS



- EXPANSION OF EXPORT OF PRODUCTS AND SERVICES TO COUNTRIES IN BOTH FAR AND NEAR ABROAD (TAJIKISTAN, TURKMENISTAN, KYRGYZSTAN, MONGOLIA)
- SUPPLY OF H145 HELICOPTERS TO CENTRAL ASIA















# «KAZAKHSTAN ASELSAN ENGINEERING» LLP



#### MANUFACTURED PRODUCTS

- COMMUNICATION EQUIPMENT OF APCO-25 AND DMR STANDARDS
- NIGHT VISION MONOCULAR A-100, NIGHT VISION BINOCULARS A230, NIGHT VISION GOGGLES A340,
   NIGHT VISION GOGGLES A360
- PYTHON, BOA, THERMAL IMAGING SIGHT ATS-20, DAYTIME VISION SIGHT A941/A961
- SHARPEYE/FALCONEYE-MW, HANDHELD INTEGRATED ELECTRO-OPTICAL SENSOR SYSTEM
- SARP REMOTELY CONTROLLED STABILIZED COMBAT PLATFORM
- VIPER LASER TARGET DESIGNATOR AND LOCATOR
- MOBILE SOFTWARE-TECHNICAL FIRE CONTROL SYSTEM FOR 122-MM D-30 HOWITZER BATTERIES (MPTK-A)
- SOFTWARE-DEFINED HF, VHF MILITARY RADIO STATIONS, RECONNAISSANCE AND SURVEILLANCE EQUIPMENT
- TECHNICAL MEANS OF BORDER PROTECTION, MIDAS ALARM SYSTEM
- PRODUCTION OF IVL DEVICES "BIOVENT"
- AUTOMATED ALERT SYSTEM
- DRONE ELECTRONIC COUNTERMEASURE SYSTEM "IHASAVAR"
- MINI THERMAL IMAGING SIGHT
- NIGHT VISION SIGHT A-360

- Situational awareness software MIRSAD
- 30mm stabilized remotely controlled combat module NEFER
- Integration of mobile reconnaissance-patrol complexes (MRPC) into combat vehicles
- Production of field tactical control ATCs DS200T, inter-network screens AG-102 and TAG-102
- Manufacturing of radio stations of "DMR Tier III" standard
- Manufacturing of signaling and voice devices (SSD). Manufacturing of X-ray control systems.







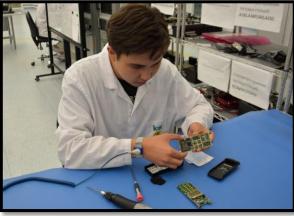
















## «MACHINE-BUILDING PLANT NAMED AFTER S.M. KIROV» JSC





#### MANUFACTURED PRODUCTS

- PRODUCTION OF HYDRAULIC COMPONENTS (HYDRAULIC CYLINDERS, VALVES, RELIEF VALVES, ETC.)
- MODERNIZATION AND REPAIR OF SPECIAL PRODUCTS (TORPEDOES)
- SPECIAL BARRIERS FOR EMERGENCY SITUATIONS
- SPARE PARTS FOR SPECIAL PRODUCTS
- COMBUSTION AUTOMATION PRODUCTS
- RAILWAY PRODUCTS
- PRODUCTION OF LINEAR SUSPENSION FITTINGS
- VALVES, BALL VALVES, FLANGES, ROLLING MILLS, CIRCUIT BREAKERS

- PRODUCTION OF MINES (MDM-1,2,3)
- MODERNIZATION OF TORPEDO 53-65K, MDS-2510
- COASTAL TORPEDO COMPLEX FOR NAVAL FORCES OF THE REPUBLIC OF KAZAKHSTAN
- DEVELOPMENT OF A NEW 324MM TORPEDO FOR THE NAVAL FORCES OF THE REPUBLIC OF KAZAKHSTAN
- MANUFACTURING OF A HYBRID MULTISYSTEM FOR CLEANING AND DISINFECTING VIRUSES





















# «KAZTECHNOLOGY» JSC



#### **MANUFACTURED PRODUCTS**

INDUSTRIAL DISPOSAL OF AMMUNITION

- Expansion of the range of disposed ammunition (ammunition containing hexogen up to 152 mm caliber, engineering ammunition)
- Utilization of unused military property in the form of ammunition using own funds to generate profit from the sale of processing products (metal, powder, TNT)













# «STEEL MANUFACTURING» LLP



#### **MANUFACTURED PRODUCTS**

- PRODUCTION OF CARTRIDGES 5.45X39 MM
- PRODUCTION OF CARTRIDGES 7.62 MM
- PRODUCTION OF CARTRIDGES 9X18 MM
- PRODUCTION OF CARTRIDGES 9X19 MM

- LAUNCH OF A PRODUCTION LINE FOR RIFLE CARTRIDGES (5.45X39 MM, 7.62X54R)
- EXPANSION OF THE RANGE OF MANUFACTURED CARTRIDGES (NATO STANDARD CARTRIDGES CALIBERS 308, 338, 375)















## **DEVELOPMENT OF AN AVIATION TRAINING CENTER IN ASTANA**

runway

#### Main goals of the project

Organization of reception, release and provision of airport services for charter flights and business jet aircraft

Preparation for the creation

of a second airfield in

Astana

Organization of interdistrict and interregional air traffic

Creation of an airline/ air taxi in the future

Providing services for geodetic and agricultural work (UAV / AN-2) and entertainment services ( sk

Training and retraining of aviation specialists (flight and ITS, UAV pilots)

# Construction of hangars Construction of a new





Leasing of new aircraft for pilot training

#### Location



#### Aerodrome

y dive )

- $\checkmark$  Three runways (unpaved), with dimensions of 1200m x 65m, 585m x 65m and 560m x 55m. for aircraft with a maximum take-off weight of up to 7 tons .
- ✓ The airfield has the following infrastructure facilities:
- Two aircraft hangars; Learning Campus;
- Control and dispatch center;
- Warehouses.



#### Certificates / licenses

- $\checkmark$  State license (unlimited term), issued in 2008 to engage in educational activities,
- majoring in Traffic Control and Operation of Air Transport.
- ✓ Aviation training center certificate allowing you to:
  - initial training of aviation personnel;
  - retraining of aviation personnel.
- ✓ Air navigation service provider certificate.

#### Zholaman airfield\_\_

**Update airfield** 



#### **Aviation Park**



6 aircraft TL-2000 Sting Carbon

2 planes TL-2000 Sting S4

1 *plane* TL-3000 + 1 *plane* Zlin Z-242L



# SHIPYARD BUILDING (DUAL-PURPOSE MANUFACTURING AND SERVICE)

#### Areas of planning production

#### **Manufactured products**

- Ships for the Ministry of Defense of the RK, the Ministry of Emergency Situations of the RK, the National Security Committee of the RK, etc.;
- Multipurpose vessels;
- Boats;
- · Civil products;
- Provision of ship maintenance services;
- Production of components





Preliminary cost project up to \$ 250 million

#### **Vessel production**







Barges (from 15 to 25 million \$)



Tankers (from 15 to 25 million S)



#### Location







## INDUSTRIAL PARKS KAZAKHSTAN ENGINEERING



NC «KAZAKHSTAN ENGINEERING» JSC together with local executive bodies and the Industrial Development Fund will develop a program for financing small and medium-sized businesses





Attracting local investors by:

Transfer on behalf of NC «KAZAKHSTAN ENGINEERING» JSC of land plots and/or workshops.





In turn, the investor invests in the construction / repair of production facilities.





NC «KAZAKHSTAN ENGINEERING» JSC provides assistance in attracting tenants (SMB)

- Small and medium-sized businesses are provided with a ready-made production site with a preferential rental rate
- SMBs can apply for a financial loan at a preferential rate
- On the part of JSC "NC "KAZAKHSTAN ENGINEERING" it is possible to provide off-take contracts

#### **EFFECT:**

CONTRIBUTING TO THE FORMATION OF A HIGHLY EFFICIENT ECONOMY, PROVIDING SUPPORT TO BUSINESSES TO ENSURE THE ECONOMIC AND SOCIAL WELL-BEING OF THE CITY, CREATING A FIELD OF GREAT OPPORTUNITIES FOR BUSINESS DEVELOPMENT IN ASTANA

There is a demand in gunpowder production in the country, although the necessary raw materials (cotton fiber, nitric acid, and sulfuric acid) are available.

Foreign gunpowder manufacturers are being considered for potential technology transfer. An essential requirement is assistance with the export of the manufactured products.









## Casting using gasifiable patterns

#### Advantages of gasified casting:

- Reduction in the weight of cast products by 15-30%;
- Increase in metal utilization rate up to 90%;
- Reduction in auxiliary material consumption by up to 90%:
- Reduction in labor costs by 3 times;
- Shortening of the casting production cycle;
- · Reduction in capital costs for equipment;
- Elimination of core-making and mixing equipment from the production process;
- Use of dry quartz sand as a material and strengthening of molds with vacuum;
- Lower personnel qualification requirements;
- Reduction in the number of technological operations;
- Use of inexpensive tooling;
- Significant improvement in working conditions;
- Reduction in the volume of mechanical processing of castings by 40%;
- · Casting accuracy up to 9th grade;
- Surface roughness up to 20 μm;
- Reduction in the weight of cast products by 30%.



Preliminary cost project

up to \$ 3,6 million

# Within the framework of the project, the following types of products are planned for release:

- Wedges
- Counterweights







